HAER No. PR-24

Isla de Mona Light (Faro de la Isla de la Mona) Mona Island Puerto Rico

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## PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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## HISTORIC AMERICAN ENGINEERING RECORD

## Isla de Mona Light (Faro de la Isla de la Mona)

PR-24

Location:

On the east cape of Mona Island approximately 37 miles west of Puerto Rico on the western side of

Mona Passage

Position: 18° 5' 18" N - 67° 50' 48" W

Date of Erection:

ca. 1888-1894

Present Owner:

U.S. Department of Commerce

U.S. Coast Guard

Original Owner:

Central Lighthouse Commission Colonial Public Works Office Harbor and Port Section Government of Spain

Present Use:

Operating Lighthouse

Significance:

Mona Island Light is the only existing lighthouse for which two entirely different plans were drawn between 1885-1886. The first plan called for a 2nd class light, 22 miles range light beam, 3 keepers, and a structure (37.7 x 24 mts) with 25 rooms. It was to be built around a central courtyard. The octagonal tower (5.5 mts. in diameter) was 16 mts. high excluding the 7 mt. high lantern. The walls generally measured 1 mt. thick. According to the evidence this massive structure was under study in 1885 to be located at the present site.

In 1888 a lighthouse was under construction and the illuminating apparatus had been commissioned from a manufacturer. By 1890 it was being built and its characteristics determined as a white light flashing every 2'. But the first reference -- 1894-- so far found about the actual construction talks of "a metallic lighthouse" not of a brick and masonry structure. This puzzling situation suggests that the long construction project actually refers to the second lighthouse project presented in 1886 to be built of iron and steel. On this respect, terrain conditions at Mona --very porous, fragile and brittle sandstone -- was better suited for an iron structure than a massive brick and masonry building. The iron project was apparently

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approved in early or mid 1887. Its construction might have started sometime in 1888. The reasons for the lengthy construction could have been technical problems, faulty communications with mainland Puerto Rico, or, the difficult terrain conditions on the Island. Nevertheless, according to secondary evidence, the light was finished between 1898 and 1900 but not as originally planned since the tower was located between two identical keeper dwellings of which only one was built. The main standing structure is an iron tower with a central cylindrical shaft braced laterally with iron lattice work (231 ft above mhw). It has an iron winding stairway into the 3 mts. in diameter, 2.5 mts. and 12 sided lantern.

The illuminating apparatus was a lenticular, 2nd order, 1.4 mts. in diameter, 1889 Sautter, Lemonnier & Cie. lens. It has 6 panels, 3 flashing ones. The central drum has 12 elements. In each panel above the central drum there are 16 prisms and 6 below. The flashes were produced by the entire revolving lens mounted on a chariot activated by a clock work system. The clock cord and its 180 lb. weight descended through the tower stairway central column. In 1938 the light was electrified and its characteristics changed. In 1973 it was automated, unmanned, and characteristics changed once more. In 1976 the light was relocated in another position and the lens removed and stored at U.S.C.G. San Juan Base, and the structures abandoned.

The keeper's dwelling as built —one out of two planned—remains as a slightly transformed structure approximately 20 x 10 mts. with 7 rooms (approximately identical dimensions), and two outside structures which were the old kitchens. It is built of steel plates and wooden framing. It is connected to the tower by a covered steel passage.

Isla de Mona Light is the largest and most important lighthouse on the Island, for it stands in the center of the historically famous Mona Passage. Also, it is the only structure in the lighthouse system --including the keeper's dwelling-- built of iron and steel.

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Transmitted by:

Kevin Murphy, Historian HAER, August 1984; from the National Register Nomination prepared by Dr. Benjamin Nistal-Moret, August 1979.